ABSTRACT

A water-soluble, flame retardant polyester resin is obtained by a condensation reaction or a polycondensation reaction of a dicarboxylic-acid component, a glycol component, a water-solubility imparting component and a reactive phosphorus-containing compound such that a ratio of the water-solubility imparting component in a total of the dicarboxylic-acid component and the water-solubility imparting component is in a range of 1 to 60 mol%. Since this polyester resin can be dissolved in a solvent by allowing a halogen-free, phosphorus-containing polyester with excellent flame resistance to have water solubility, it is possible to improve applicability and eliminate problems of working environment and environmental destruction resulting from organic solvents. In addition, even when treating substrates such as fibers and PET films with the polyester resin, there is no deterioration of these substrates.